

## Chapter 10 sections 1-5 review guide ANSWER KEY

1. Area = 225; perimeter = 60
2. Area = 198; perimeter = 58
3. Area =  $72\sqrt{3}$ ; perimeter = 48
4. Area = 139.4; perimeter = 45
5. Area = 3000; perimeter = 232
6. Area = 403; perimeter = 72
7. Area = 72
8. Area = 28
9. Area =  $162\sqrt{3}$
10. Question should read "Two similar rectangles have a scale factor of 4:3. If the area of the larger rectangle is 96 units<sup>2</sup>, find the area of the smaller rectangle. Area = 72. (54 is also acceptable.)
11. Area = 36cm<sup>2</sup>
12. Area = 21in<sup>2</sup>
13. Area = 36in<sup>2</sup>
14. Area = 16.5ft<sup>2</sup>
15. Area = 54cm<sup>2</sup>
16. Area =  $24\sqrt{3}$ m<sup>2</sup>
17. Ratio of the perimeters is 2:5. Ratio of the areas is 2<sup>2</sup>:5<sup>2</sup> or 4:25
18. Scale factor is 3:4 (side/perimeter) and/or 9:16 (area)
19. Area =  $64\sqrt{3}$ cm<sup>2</sup>
20. Area =  $96\sqrt{3}$ in<sup>2</sup>
21. Area = 43cm<sup>2</sup>
22. Area  $\cong$  77.3m<sup>2</sup>
23. Area = 4.73in<sup>2</sup>
24. Area =  $\frac{25}{4}\sqrt{3} + 25 + 110 = 135 + \frac{25}{4}\sqrt{3}$  or  $\cong$  145.82
25. a) angle b) triangle; top c) apothem; trig d) side; perimeter e)  $A = \frac{1}{2}(a * P)$
26. Area  $\cong$  483cm<sup>2</sup>
27. Area  $\cong$  116.4ft<sup>2</sup>
28. Area  $\cong$  75.3m<sup>2</sup>
29. Area  $\cong$  30.2m<sup>2</sup>
30. Area  $\cong$  31ft<sup>2</sup>
31. Area  $\cong$  74.9km<sup>2</sup>
32. Area  $\cong$  34.9mm<sup>2</sup>